

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/657,886	09/09/2003	Mark K. Hennig	HO-P02832US0	2621	
26271	7590 09/20/200	ı	EXAMINER		
	IT & JAWORSKI, I	JULES, FRANTZ F			
1301 MCKIN SUITE 5100			ART UNIT	PAPER NUMBER	
HOUSTON,	TX 77010-3095		3617		

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	M				
Office Action Summary		10/657,886	HENNIG ET AL.	• 1				
		Examiner	Art Unit					
		Frantz F. Jules	3617					
7 Period for F	The MAILING DATE of this communication appe Reply	ears on the cover sheet with the c	orrespondence addre	ess				
THE MA - Extension after SIX - If the peri If NO per - Failure to Any reply	RTENED STATUTORY PERIOD FOR REPLY ALING DATE OF THIS COMMUNICATION. In softime may be available under the provisions of 37 CFR 1.136 (6) MONTHS from the mailing date of this communication. Find for reply specified above is less than thirty (30) days, a reply riod for reply is specified above, the maximum statutory period with the set or extended period for reply will, by statute, or received by the Office later than three months after the mailing eatent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days II apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this comm D (35 U.S.C. § 133).	nunication.				
Status								
1)⊠ R€	esponsive to communication(s) filed on 29 Jul	ly 2004.						
2a)⊠ Th	nis action is FINAL . 2b) This	action is non-final.						
3) <u></u> Si⊢	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the ments is							
clo	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition	of Claims							
4)⊠ CI	aim(s) <u>1-16</u> is/are pending in the application.							
) Of the above claim(s) is/are withdraw	n from consideration.						
5) CI	aim(s) is/are allowed.							
6)⊠ CI	6)⊠ Claim(s) <u>1,5,10-11</u> is/are rejected.							
7)□ CI	aim(s) is/are objected to.							
8) <u></u> CI	8) Claim(s) are subject to restriction and/or election requirement.							
Application	Papers			•				
9)∐ The	e specification is objected to by the Examiner	•						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The	e oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-	152.				
Priority und	ler 35 U.S.C. § 119							
12) <u></u> Acl	knowledgment is made of a claim for foreign p	oriority under 35 U.S.C. § 119(a)	-(d) or (f).					
a) All b) Some * c) None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3.[d in this National Sta	age				
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
	References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
	Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te	· · · · · · · · · · · · · · · · · · ·				
•	on Disclosure Statement(s) (PTO-1449 or PTO/SB/08) o(s)/Mail Date	5) Notice of Informal Pa	atent Application (P10-15) ~)				
.S. Patent and Trader	mark Office							

ŕ

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 5, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naedler (US 6,401,743) in view of Kostroun et al (US 3,645,479).

Claims 1, 5, 10-11

Naedler discloses a wheel end assembly rotatable on an axle on a vehicle having a high temperature warning system comprising, an air pressure supply positioned inside the axle (8) and connected to a pressure source on the vehicle, a valve (3) connected to the axle.

Naedler discloses all of the features as listed above but does not disclose a wheel end assembly comprising a heat sensitive control and a normally closed valve mounted on the axle for measuring the temperature of the assembly and axle and a warning system connected to the pressure supply for actuation upon opening of the valve. The general concept of providing a wheel end assembly comprising a heat sensitive control and a normally closed valve mounted on an air container for measuring the temperature of the air container and a warning system connected to the pressure supply for actuation upon opening of the valve is well known in the art as illustrated by Kostroun et al which disclose the teaching of a heat sensitive control (58) for measuring the temperature of

4

the tire and a normally closed valve mounted on the axle for measuring the temperature of the assembly and axle and a warning system connected to the pressure supply for actuation upon opening of the valve (40), see abstract section. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Naedler to include the use of "a heat sensitive control and a normally closed valve mounted on the axle for measuring the temperature of the assembly and axle and a warning system connected to the pressure supply for actuation upon opening of the valve" in his advantageous wheel end assembly as taught by Kostroun et al in order to prevent

Allowable Subject Matter

overheating of the wheel end assembly thereby increasing the safety in the system.

3. Claims 2-4, 6-9, 12-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 07/29/2004 have been fully considered but they are most in view of the new ground of rejection.

Applicant's argument that Kostroun et al do not disclose a heat sensitive control mounted on the axle for measuring the temperature of the wheel end assembly and axle is weak as Kostroun et al disclose a temperature sensing valve comprising means mounted on said valve for producing an air release signal for activating a warning signal. Thus it is clear that the temperature sensing valve is a heat sensitive control valve since an increase in temperature in the system is equivalent to heat generation in

Art Unit: 3617

¥

the system. One of ordinary skill in the art would have been motivated to position the normally closed valve and the heat sensitive control on the axle to achieve among other the benefit of monitoring air loss and temperature increase in the wheel end assembly.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules **Primary Examiner** Art Unit 3617

FFJ

September 13, 2004

FRANTZ F. JULES PRIMARY EXAMINER

Page 5